

**ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM**

Invertebrate Abstract

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CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Agathymus polingi*

COMMON NAME: Poling's Giant Skipper, Little Giant-Skipper, Amole Giant-Skipper, Poling's Agave Borer

SYNONYMS:

FAMILY: HesperIIDae

AUTHOR, PLACE OF PUBLICATION: Skinner, *Megathymus*. 1905. Ent. News, 16: 232.

TYPE LOCALITY: Probably Baboquivari Mountains, Pima County, Arizona.

TYPE SPECIMEN: Holotype in the Carnegie Museum.

TAXONOMIC UNIQUENESS: The genus *Agathymus* consists of eight species. All are found in the southwest and are closely associated with *Agave* plants. Three species are found within the boundaries of Coronado National Forest, *A. polingi*, *A. aryxna*, and *A. evansi*. All three were originally placed in the genus *Megathymus*, a closely allied genus of yucca feeding skippers. (Brock and Prchal 2001).

DESCRIPTION: Wingspan (41-44 mm). The sexes are slightly different with females averaging slightly larger and with much more orange scaling on both wings.

Upperside: Brownish-black with wide orange-yellow spots fused into bands, the basal area orangish; the females are especially orange with much wider bands and very little black on either wing.

Underside: Mottled light and dark gray. The pale band is usually complete and much wider on the female.

AIDS TO IDENTIFICATION: Although this is the smallest of the *Agave* feeding skippers. It is still larger than most skippers of the genera. The non-hooked antennae will further separate it from all but sympatric giant skippers. *Agathymus polingi* flies later in the year than *Megathymus ursus* (Ursine Giant-Skipper). *Agathymus evansi* (Huachuca Giant-Skipper) occurs at much higher elevations and in a different habitat than *A. polingi*. *Agathymus aryxna* (Arizona Giant-Skipper) flies with *A. polingi* but is considerably larger in size (45-58 mm) and is much less orange above with the pale band below not nearly as well defined as on *A. polingi*. (Brock and Prchal 2001).

ILLUSTRATIONS: Color drawing of upperside male (Opler and Wright, 1999: Plate 44)
B&W photo of upper and underside male (Bailowitz and Brock, 1991: page 110)
Color photo of upperside male (Scott, 1986: Plate 57)
Color photo of upper and underside female (Scott, 1986: Plate 57)
Color drawing of upper and underside male (Howe, 1975: Plate 81)
Color drawing of upperside female (Howe, 1975: Plate 81)
Color photos of adult and pupa (Brock and Prchal 2001)

TOTAL RANGE: Sonora, Mexico, Arizona, and a population known from Hidalgo County, New Mexico. The distribution of this insect is no doubt closely tied with that of its host, *Agave schottii*.

RANGE WITHIN ARIZONA: In Arizona, presently known from Maricopa, Pinal and Graham counties southward into Sonora, Mexico. (Brock and Prchal 2001). County records include Cochise, Graham, Pima, Pinal and Santa Cruz (Bailowitz and Brock 1991).

SPECIES BIOLOGY AND POPULATION TRENDS

BIOLOGY: Neither sex visits flowers and the adults have not yet been found to visit mud. Therefore, the adults are probably short lived. Males perch on rock faces in or near stands of the food plant to await females. These perching locations usually face the sun. (Brock and Prchal 2001).

REPRODUCTION: Eggs are pale yellow turning dark red or orange, laid singly on or near the host. Young larvae bore into the leaf tips where they hibernate. Mature larvae bore into the bases of several leaves and partially into the stem. Mature larvae are whitish, bluish or greenish and cease feeding in July. The trapdoor silky whitish, on the underside of the leaf base. Pupa is light brown, and sits for a few months before emerging. (Brock and Prchal 2001).

FOOD HABITS: *Agave schottii*.

FLIGHT PERIOD: Adults are on the wing from early October (Oct. 4) to early November (Nov. 2) in a single brood.

HABITAT: Open, rocky flats and slopes near stands of the host (Brock and Prchal 2001). It frequents dry, shindagger-covered hills of SE Arizona, sometimes in great numbers (Bailowitz and Brock 1991).

ELEVATION: Most colonies of this skipper occur between 4,240 - 6,877 ft. (1293-1800 m).

PLANT COMMUNITY:

POPULATION TRENDS:

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS:	None
STATE STATUS:	None
OTHER STATUS:	Forest Service Sensitive (USDA, FS Region 3 1999)

MANAGEMENT FACTORS:

PROTECTIVE MEASURES TAKEN:

SUGGESTED PROJECTS: A survey of host plant colonies should be undertaken to determine the complete range for this species.

LAND MANAGEMENT/OWNERSHIP: USFS - Coronado National Forest, and possibly others.

SOURCES OF FURTHER INFORMATION

LITERATURE CITATIONS:

Bailowitz, R.A., and J.P. Brock. 1991. Butterflies of southeastern Arizona. Sonoran Arthropod Studies, Inc., Tucson, AZ. p. 110.

- Brock, J., and S. Prchal. 2001. Sensitive Insect Species of the Coronado National Forest. A Training Project by Sonoran Arthropod Studies Institute, Tucson, AZ.
- Howe. 1975. The Butterflies of North America. Doubleday.
- Miller and Brown. 1981. A Catalogue/Checklist of the Butterflies of America north of Mexico. The Lepidopterist's Society.
- Opler and Wright. 1999. Western Butterflies. Houghton Mifflin Company.
- Scott. 1986. Butterflies of North America. Stanford Press.
- USDA, Forest Service Region 3. 1999. Regional Forester's Sensitive Species List.

MAJOR KNOWLEDGEABLE INDIVIDUALS:

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ADDITIONAL INFORMATION:

This species is probably not worth listing until an adequate survey is completed. A good locality for this species is Molino Basin near the campground. (Brock and Prchal 2001).

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